

Soap Lab

Objective: to create soap using different a chemical reaction involving organic molecules.

Materials:

Vegetable Oil

NaOH Solution

Ethanol

Ice Water

Hot Plate

NaCl Solution

Gloves

Beaker

Stirring Rod

Screen

Procedure:

- 1) Measure 20 mL of vegetable oil and place in a 400 mL beaker
- 2) Add 20 mL of ethanol
- 3) Add 25 mL of NaOH solution

4) Stir mixture with a glass rod

5) Place beaker on hot plate and periodically stir

6) Heat until all the ethanol is removed (should be able to smell ethanol)

7) Once all the ethanol is removed, remove the beaker from the hot plate.

8) Allow mixture to cool, then add 100 mL of the NaCl solution and mix thoroughly. (soap should be forming)

9) Filter soap

10) Wash the soap twice with 10 mL of ice water.

11) Allow soap to dry